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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Confirmation Number	9399					
Application Number	10/667685					
Filing Date	09/22/2003					
First Named Inventor	Mark A. Heldreth					
Group Art Unit	3733					
Examiner Name	Ramana, Anuradh					
Attorney Docket Number	DEP777NP					

(use as many sheets as necessary) Sheet of U.S. PATENT DOCUMENTS U.S. Patent Document Date of Publication Pages, Columns, Lines, Name of Patentee or Applicant Exam Cite Kind Code of Cited Document where relevant passages or of Cited Document Initials Number (if known) No.1 mm-dd-yyyy relevant figures appear FOREIGN PATENT DOCUMENTS Foreign Patent Document Date of Pages, Columns, Publication of Lines, where relevant Name of Patentee or Exam Cite Cited Document passages or relevant Applicant of Cited Document figures appear Number⁴ KindCode⁵ mm-dd-yyyy OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published Initials CARLSON, CHARLES E., ET AL, "A Radio Telemetry Device for Monitoring Cartilage Surface Pressures in the Human Hip," IEEE Transactions on Biomedical Engineering (July 1974) Vol. BME-21, No. 4 RYDELL, NILS W., "Forces Acting on the Femoral Head-Prosthesis," (1966)

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	Substitute for form 1449A/PTO			o respond to a collection of information unless it contains a valid OMB control number Complete if Known			
				Application Number	10/667,685		
	INFORMATION DISC	CLOSU	JRE	Filing Date	09/22/2003		
	STATEMENT BY AF	PLICA	TNA	First Named Inventor	Mark Heldreth		
				Art Unit	3733		
	(Use as many sheets as ned	cessary)		Examiner Name	Anuradha Ramana		
She	et 1	of	4	Attorney Docket Number	DEP777NP		

Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
AL		^{US-} 5033291	07/23/1991	Podoloff, et al	\
*		^{US-} 4856993	08/15/1989	Maness, et al	
		^{US-} 5197488	03/30/1993	Kovacevic, Nebojsa	
		^{US-} 5360016	11/01/1994	Kovacevic, Nebojsa	
		^{US-} 5496352	03/05/1996	Renger, Herman L.	
		^{US-} 5470354	11/28/1995	Hershberger, et al	
		^{US-} 5425775	06/20/1995	Kovacevic, et al	
Ī		^{US-} 6174294	01/16/2001	Crabb, et al	
		^{US-} 5197488	03/30/1993	Kovacevic, Nebojsa	
		^{us-} 5326363	07/05/1994	Aikins, Jerry L.	
		^{US-} 5360016	11/01/1994	Kovacevic, Nebojsa	
		^{US-} 5425775	06/20/1995	Kovacevic, et al	
AL		^{US-} 5840047	11/24/1998	Stedham, David M.	
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	FOREIGN PATENT DOCUMENTS											
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ (Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T°						
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Sul	bstitute for fo	orm 1449B/PTO			Complete if Known			
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II	NFOR	MATION DI	SCLO	SURE	Filing Date	09/22/2003		
S	STATEMENT BY APPLICANT				First Named Inventor	Mark Heldreth		
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SI	heet	¥2.	of	4	Attorney Docket Number	DEP777NP		

		NON PATENT LITERATURE DOCUMENTS							
Examiner Initials* Cite No.1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.							
		HARRIS, M.L., ET AL, "An Improved Method for Measuring Tibiofemoral Contact Areas in Total Knee Arthroplasty: A Comparison of K-Scan Sensor and Fuji Film," Journal of Biomechanics (1999), 32 ed., p. 951-958,							
		SZIVEK, JOHN A., PHD., ET AL, "Average and Peak Contact Stress Distribution Evaluation of Total Knee Arthroplasties," The Journal of Arthroplasty (1996), Vol. 11 (No. 8), p. 952-963							
		BEHRENS, FRED M.D., ET AL, "Bendign Stiffness of Unilateral and Bilateral Fixator Frames," Clinical Orthopaedics and Related Research (September 1983), p. 103-110,							
		VALDEVIT, ANTONIO, ET AL, "Characterization and Application of Think Film Pressure Sensors," Bio-Medical Materials and Engineering (1999), p. 81-88,							
		GOLA, M.M., ET AL, "Developments in Transducer Stems for Mechanical Coupling Measurements in Endoprosthetics," MEP Ltd. (1982), Vol. 11 (No. 4), p. 183-186,							
		AN, KAI-NAN ET AL, "Direct In Vivo Tendon Force Measurement System," J. Biomechanics (1990), Vol. 23 (No. 12), p. 1269-1271,							
	***************************************	FILIAGGI, MARK J., ET AL, "Evaluating Sol-Gel Ceramic Thin Films for Metal Implant Applications. II Adhesion & Fatigue Properties of Zirconia Films on Ti-6A1-4V," Journal of Biomedical Materials Research (Applied Biomaterials) (1996), p. 239-256,							
		KAUFMAN, KENTON R., ET AL, "Instrumented Implant for Measuring Tibiofemoral Forces (1996)," Journal Biomechanics, Vol. 29 (No. 5), p. 667-671,							
		MARKOLF, KEITH L., PH.D., ET AL, "In Vitro Measurement of Bone-Acrylic Interface Pressure During Femoral Component Insertion," Clinical Orthopaedics and Related Research (November-December, 1976), p. 60-66,							
AR		ENGLISH, T.A., ET AL, "In Vivo Records of Hip Loads Using a Femoral Implant with Telemetric Output (A Preliminary Report)," Journal Biomedical Engineering (April 1979), Vol. 1 (No. 2), p. 111-115,							

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INFOF	RMATION DI	SCLO	SURE	Filing Date	09/22/2003		
STATI	EMENT BY	APPLI	CANT	First Named Inventor	Mark Heldreth		
				Art Unit	3733		
	(Use as many sheets as	s necessary,)	Examiner Name	Anuradha Ramana		
Sheet	¥3	of	4	Attorney Docket Number	DEP777NP		

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials* Cite		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
AL		OH, INDONG, M.D., ET AL, "Proximal Strain Distribution in the Loaded Femur," The Journal of Bone and Joint Surgery (January 1978), Vol. 60A (No. 1), p. 75-85,					
		TAKAHASHI, TOSHIAKI ET AL, "Soft Tissue Balancing with Pressure Distribution During Total Knee Arthroplasty," The Journal of Bone and Joint Surgery (March 1997), p. 235-239,					
	:	DAVY, D.T., ET AL, "Telemetric Force Measurements Across the Hip after Total Arthroplasty," The Journal of Bone and Joint Surgery (January 1988), Vol. 70A (No. 1), p. 45-50,					
		BROWN, RICHARD H., ET AL, "Telemetering In Vivo Loads from Nail Plate Implants," Journal Biomechanics (1982), Vol. 15 (No. 11), p. 815-823,					
		LAU, J.J., ET AL, "The Influence of Inserting of Fuji Pressure Sensitive Film Between the Tibiofemoral Joint of Knee Prosthesis on Actual Contact Characteristics," Clinical Biomechanics (2001), p. 160-166,					
		GUPTA, SUSHI K., M.D., ET AL, "Use of Piezoelectric Film Sensor for Monitoring Vascular Grafts," The American Journal of Surgery (August 1990), p. 182-186,					
	***************************************	MCDERMOTT, A.G.P., M.D., ET AL, "A New Method to Measure Intraosseous Pressures," Clinical Orthopaedics and Related Research (July 1986), p. 25-27,					
		MANN, R.W., ET AL, "Rehabilitation Implications of In Vivo Hip Pressure Measurements," Proceedings of the Ninth Annual Conference on Rehabilitation Technology (June 23-26, 1986), Association for the Advancement of Rehabilitation Technology (Minneapolis, Minnesota (Copyright 1986)),					
		RUSHFELDT, P.D., ET AL, "Improved Techniques for Measuring In Vitro The Geometry and Pressure Distribution in the Human Acetabulum II. Instrumented Endoprosthesis Measurement of Articular Surface Pressure Distribution," J. Biomechanics, Vol. 14 (No. 5), p. 315-323,					
AK		CARLSON, CHARLES E., ET AL, "A Look at the Prosthesis-Cartilage Interface: Design of a Hip Prosthesis Containing Pressure Transducers," J. Biomedical Material Research Symposium (1974), John Wiley & Sons, Inc., p. 261-269,					

Examiner Signature	 Kamara	Date Considered	1/	7/08
				

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AR		HODGE, W.A., M.D., ET AL, "Contact Pressures from an Instrumented Hip Endoprosthesis," The Journal of Bone and Joint Surgery Incorporated (October 1989), Vol. 71A (No. 9), p. 1378-1386,				
		JOHNSON, WESLEY D., ET AL, "Test Methodology: Evaluation of Load Transfer Across a Total Knee Replacement," Spring National Design Engineering Show & Conference, p. 131-138,				
		BEREITER, H., M.D., ET AL, "Telemetric Measurement of the Pressure Conditions in the Interface of an Implanted Acetabulum Prosthesis (In-Vivo)," Rhatisches Kantonsspatal Chur, Institut fur Physik Basel, Orthopadische Universitatsklinik Basel,				
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